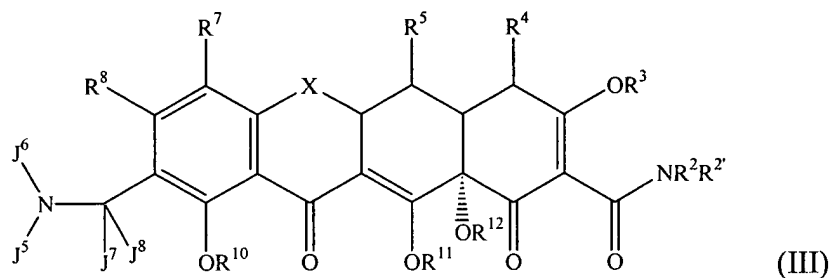


# AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of the claims and listing of the claims in the application:

1.-15. (Cancelled)

16. (Currently Amended) A tetracycline compound of formula (III):



wherein:

J<sup>5</sup> and J<sup>6</sup> are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, sulfonyl, acyl, alkoxycarbonyl, alkaminocarbonyl, alkaminothiocarbonyl, substituted thiocarbonyl, substituted carbonyl, alkoxythiocarbonyl, or linked to form a ring;

J<sup>7</sup> and J<sup>8</sup> are each alkyl, halogen, or hydrogen;

X is ~~CHC(R<sup>13</sup>Y'Y)~~, CR<sup>6'</sup>R<sup>6</sup>, C=CR<sup>6'</sup>R<sup>6</sup>, S, NR<sup>6</sup>, or O;

R<sup>2</sup>, R<sup>2'</sup>, R<sup>4'</sup>, and R<sup>4''</sup> are each independently hydrogen, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R<sup>4</sup> is NR<sup>4'</sup>R<sup>4''</sup>, alkyl, alkenyl, alkynyl, aryl, hydroxyl, halogen, or hydrogen;

R<sup>2</sup>, R<sup>3</sup>, R<sup>10</sup>, R<sup>11</sup> and R<sup>12</sup> are each hydrogen or a pro-drug moiety;

R<sup>5</sup> is hydroxyl, hydrogen, thiol, alkanoyl, aroyl, alkaroyl, aryl, heteroaromatic, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, alkyl carbonyloxy, or aryl carbonyloxy;

R<sup>6</sup> and R<sup>6'</sup> are each independently hydrogen, methylene, absent, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R<sup>7</sup> is hydrogen, nitro, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, arylalkyl, amino, arylalkenyl, arylalkynyl, thionitroso, or -(CH<sub>2</sub>)<sub>0</sub>.  
<sub>3</sub>NR<sup>7c</sup>C(=W')WR<sup>7a</sup>,

W is CR<sup>7d</sup>R<sup>7e</sup>, S, NR<sup>7b</sup> or O;

W' is O, S, or NR<sup>7f</sup>;

R<sup>7a</sup>, R<sup>7b</sup>, R<sup>7c</sup>, R<sup>7d</sup>, and R<sup>7e</sup> are each independently hydrogen, acyl, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R<sup>8</sup> is hydrogen, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R<sup>13</sup> is hydrogen, hydroxy, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl; and

~~Y' and Y are each independently hydrogen, halogen, hydroxyl, cyano, sulfhydryl, amino, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl, and pharmaceutically acceptable salts thereof.~~

17. (Original) The tetracycline compound of claim 16, wherein R<sup>4</sup> is NR<sup>4'</sup>R<sup>4''</sup>, X is CR<sup>6</sup>R<sup>6'</sup>; R<sup>2</sup>, R<sup>2'</sup>, R<sup>6</sup>, R<sup>6'</sup>, R<sup>8</sup>, R<sup>10</sup>, R<sup>11</sup>, and R<sup>12</sup> are each hydrogen; R<sup>4'</sup> and R<sup>4''</sup> are lower alkyl; and R<sup>5</sup> is hydroxy or hydrogen.

18. (Original) The tetracycline compound of claim 17, wherein R<sup>4'</sup> and R<sup>4''</sup> are each methyl and R<sup>5</sup> is hydrogen.

19. (Original) The tetracycline compound of claim 16, wherein J<sup>7</sup> and J<sup>8</sup> are hydrogen.

20. (Original) The tetracycline compound of claim 16, wherein J<sup>5</sup> is substituted or unsubstituted alkyl.

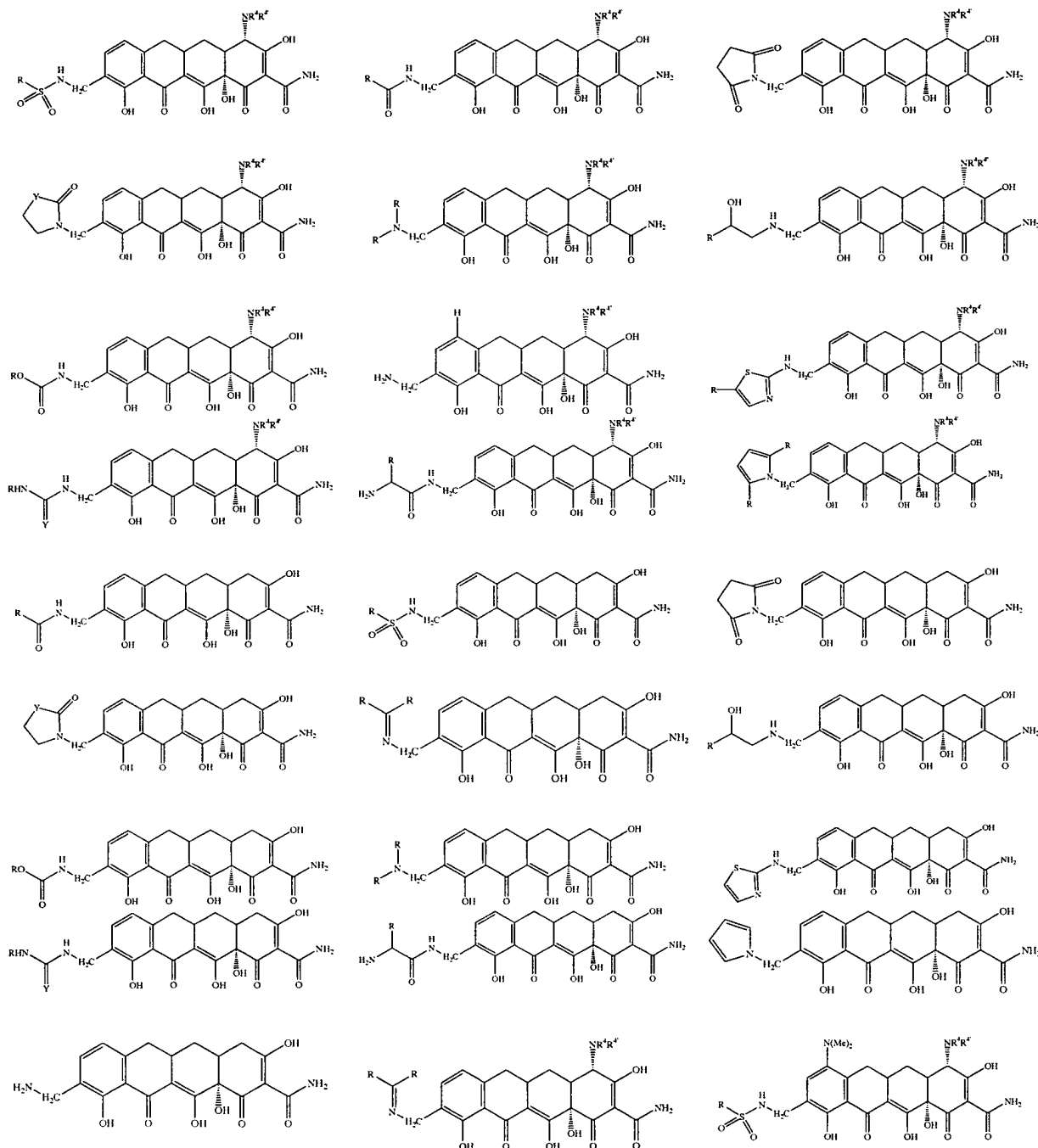
21. (Original) The tetracycline compound of claim 16, wherein J<sup>5</sup> is sulfonyl.

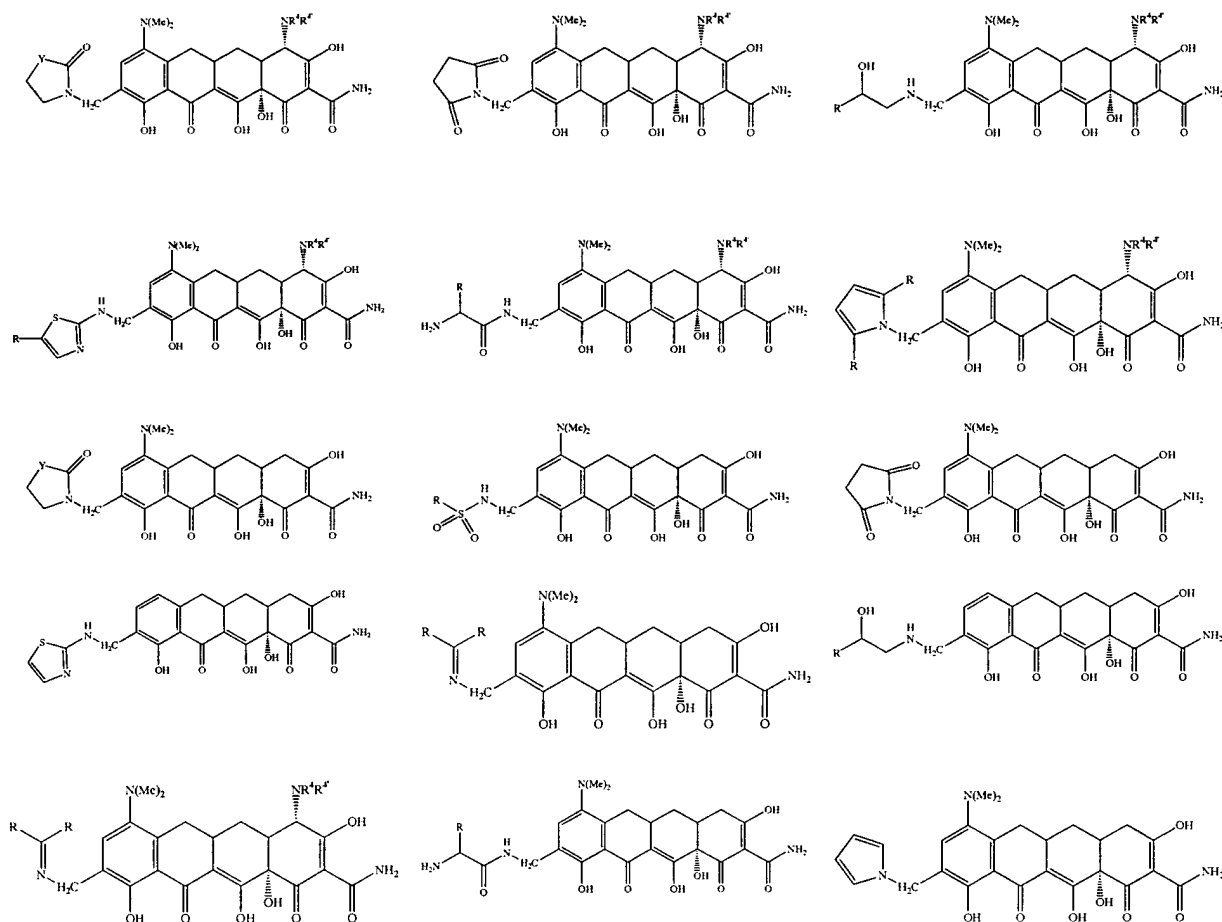
22. (Original) The tetracycline compound of claim 16, wherein J<sup>5</sup> and J<sup>6</sup> are linked to form a ring.

23. (Original) The tetracycline compound of claim 16, wherein J<sup>5</sup> is heteroaryl.

24. (Original) The tetracycline compound of claim 16, wherein J<sup>5</sup> is substituted carbonyl.

25. (Currently Amended) The tetracycline compound of claim 16, wherein said compound is selected from the group consisting of:

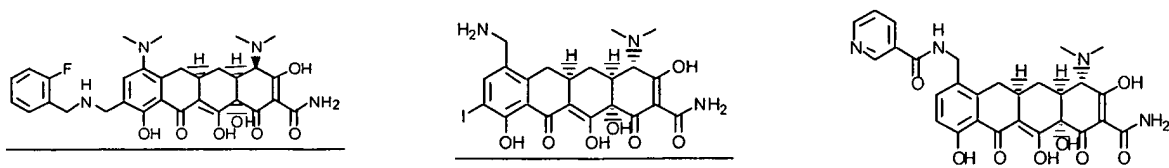


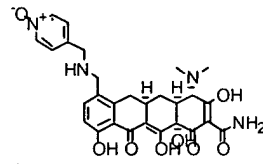
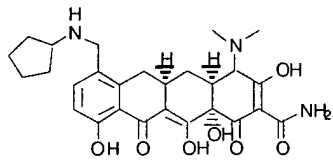
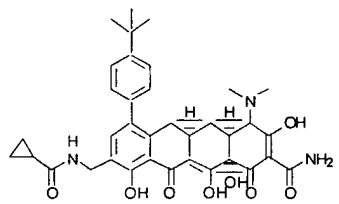
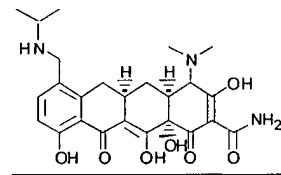
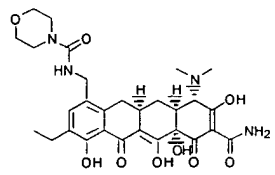
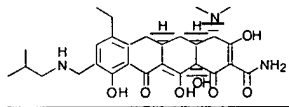
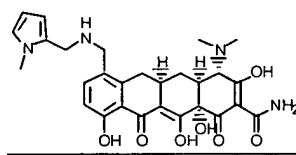
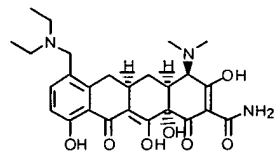
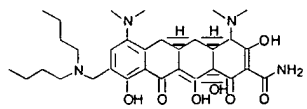
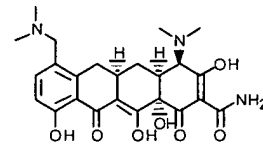
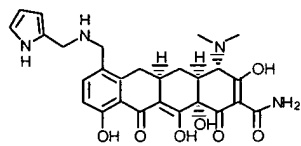
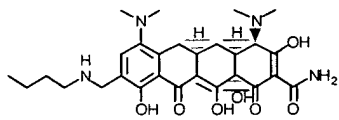
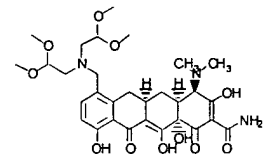
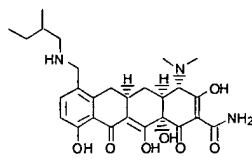
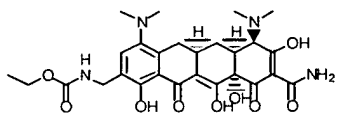
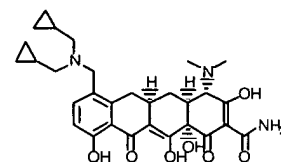
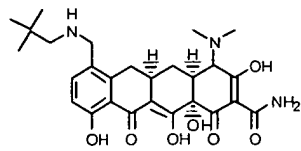
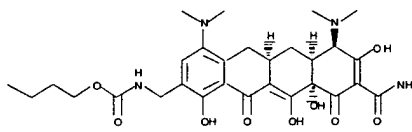
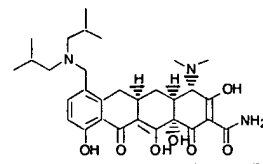
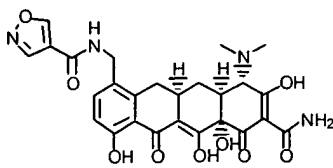
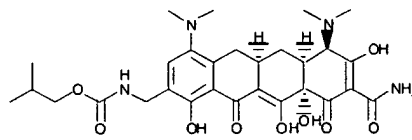
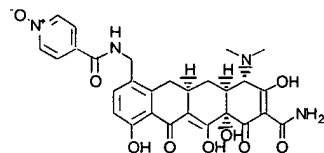
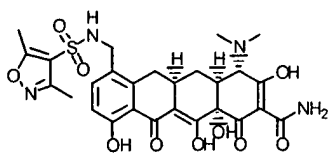
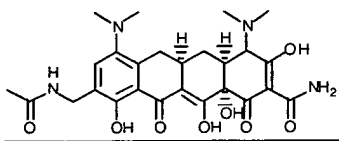


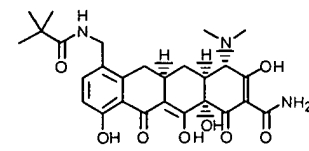
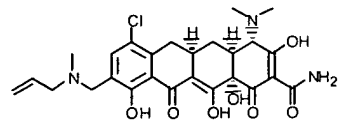
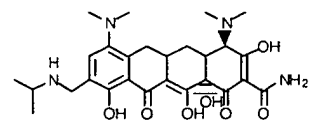
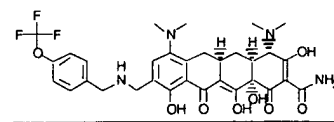
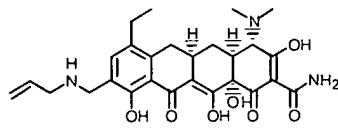
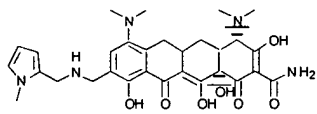
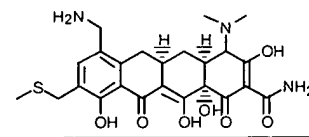
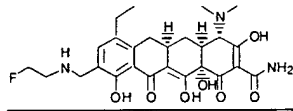
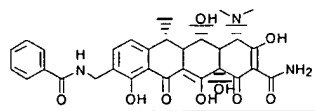
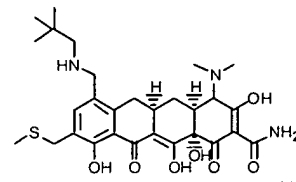
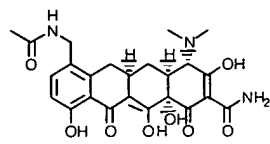
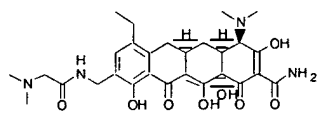
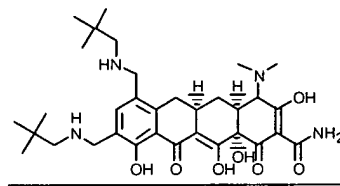
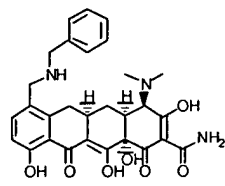
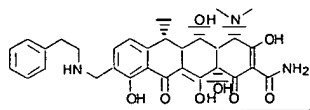
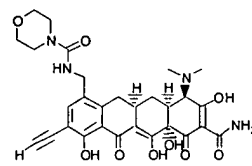
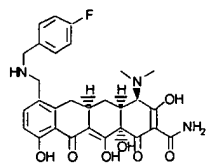
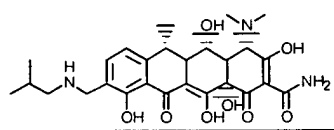
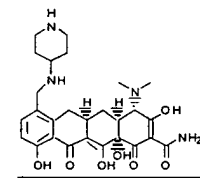
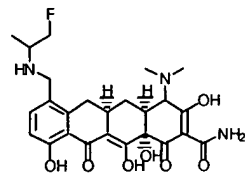
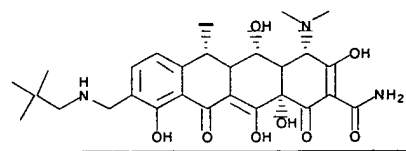
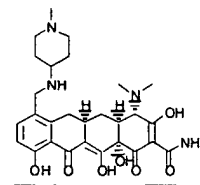
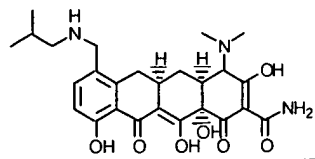
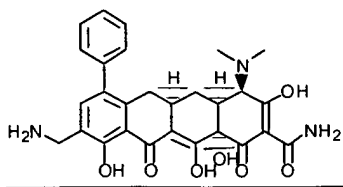
wherein

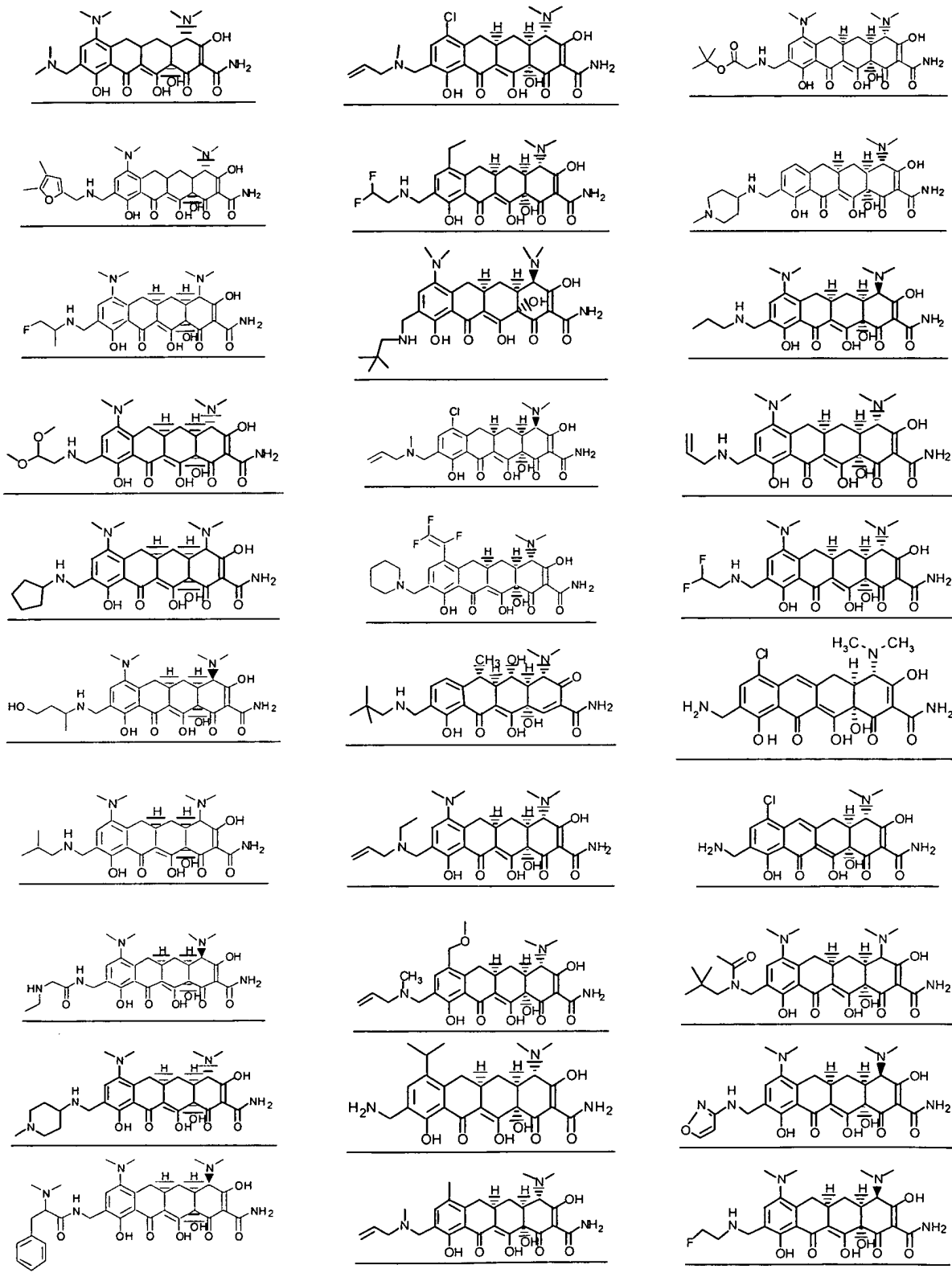
R is substituted or unsubstituted alkyl, alkenyl, alkynyl, halogen, alkoxy; and  
Y is N, O, or S, or pharmaceutically acceptable salts or prodrugs thereof.

26. (Currently Amended) A tetracycline compound selected from the following: ~~of Table 1,~~



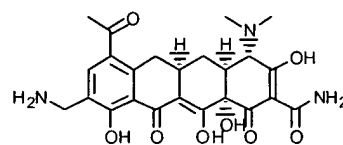
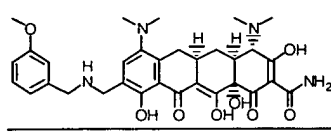
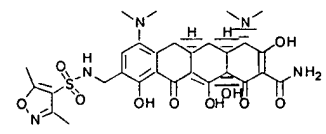
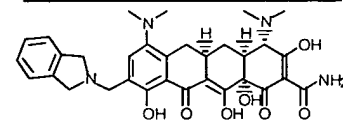
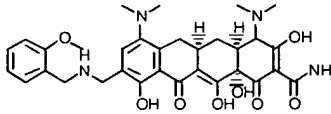
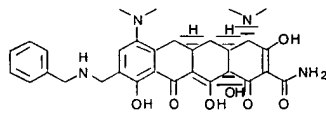
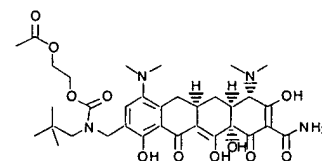
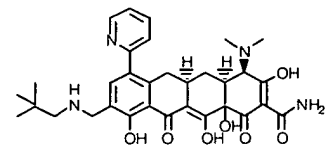
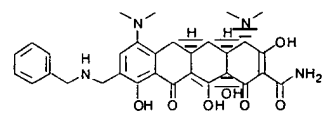
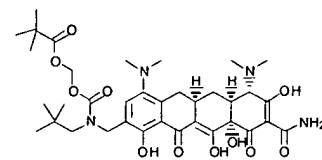
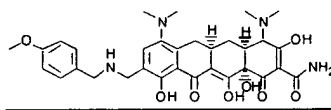
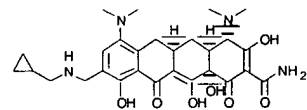
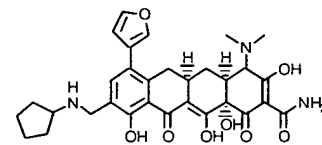
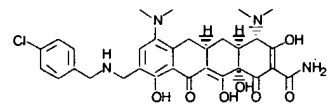
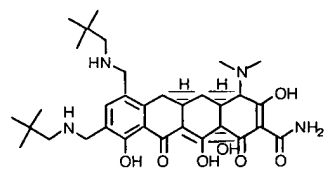
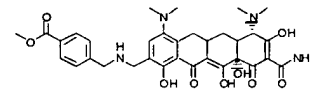
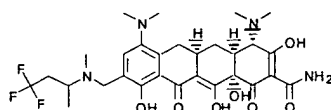
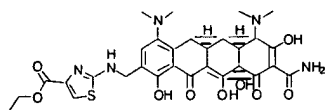
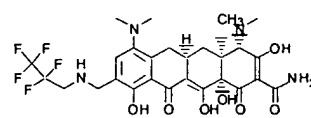
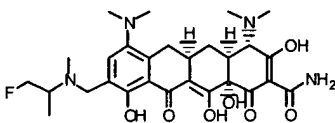
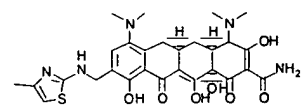
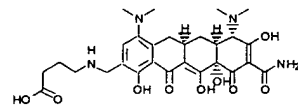
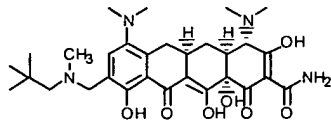
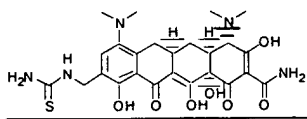
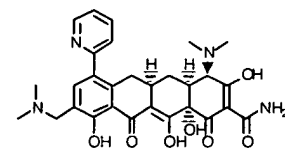
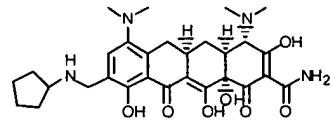
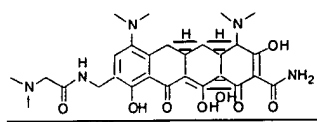


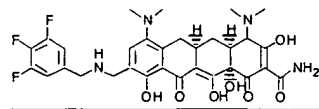
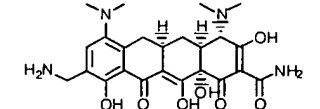
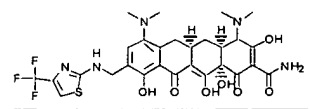
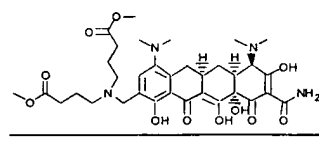
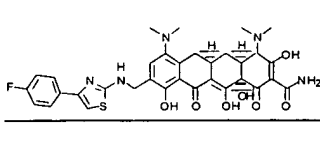
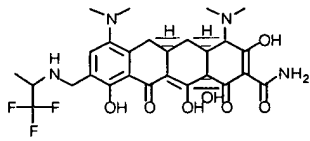
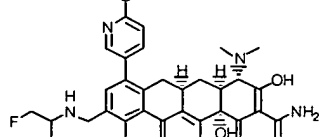
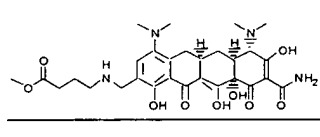
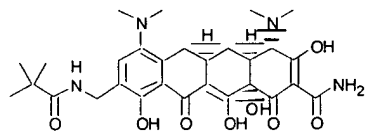
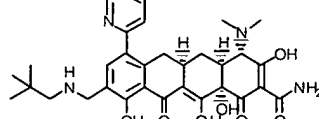
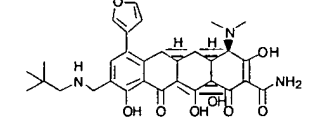
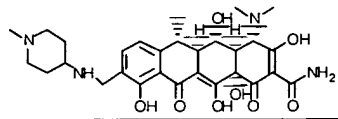
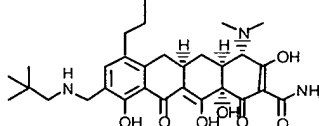
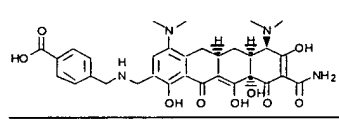
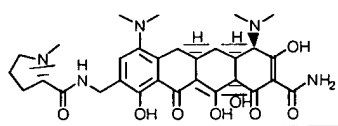
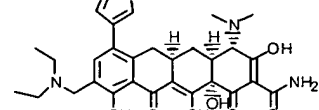
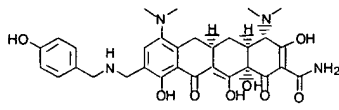
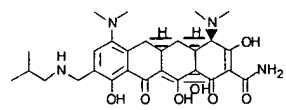
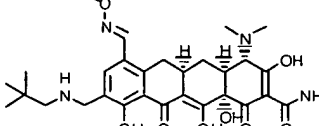
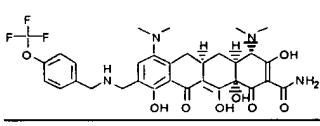
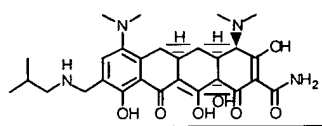
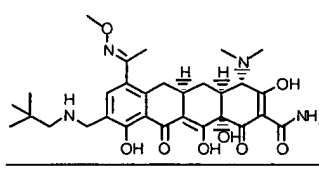
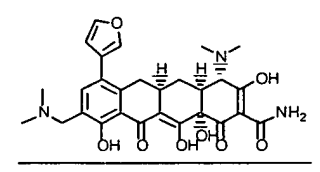
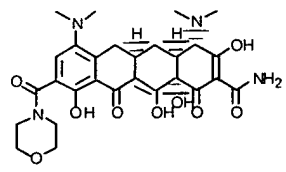
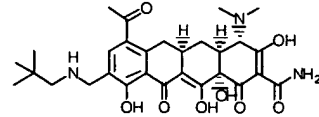
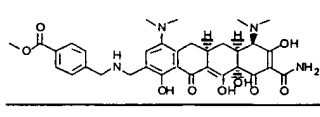
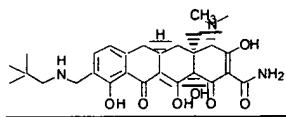


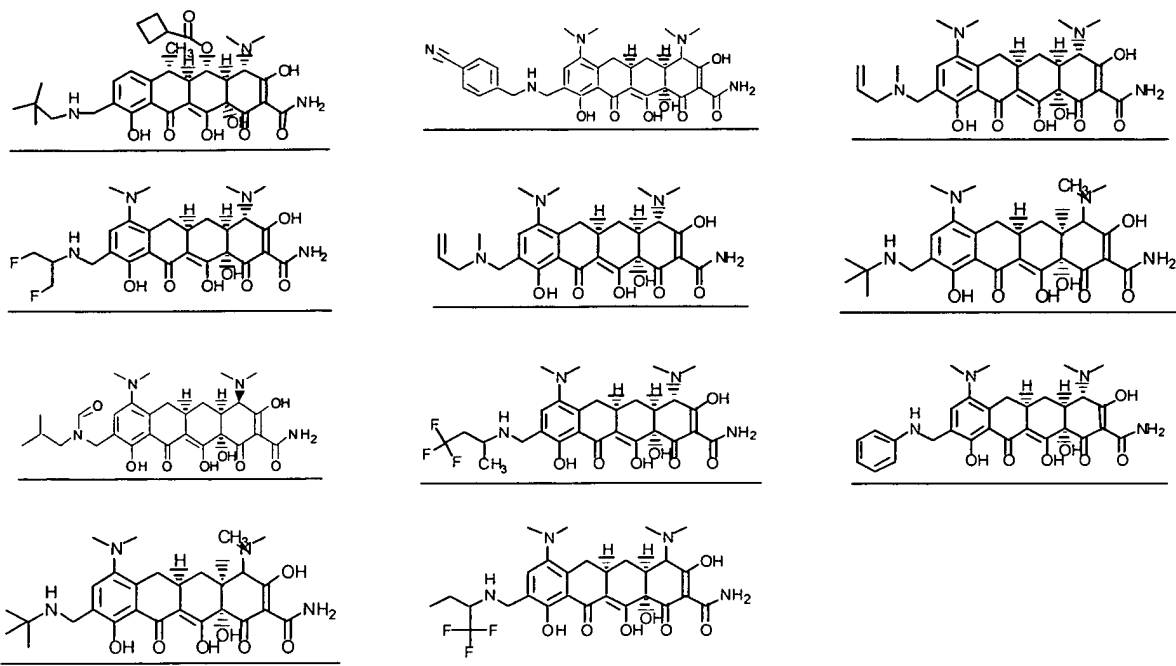












or a pharmaceutically acceptable salt thereof.

27. (Currently Amended) A pharmaceutical composition comprising an effective amount of a tetracycline compound of any one of claims 4, 15, 16, 25 or 26, and a pharmaceutically acceptable carrier.

28. (Original) The pharmaceutical composition of claim 27, wherein said effective amount is effective to treat a tetracycline responsive state.

29.-41. (Cancelled)

42. (New) The compound of claim 16, wherein  $R^7$  is dialkylamino.

43. (New) The compound of claim 42, wherein  $R^7$  is dimethylamino.

44. (New) The compound of claim 16 or 24, wherein  $J^6$  is alkyl.

45. (New) The compound of claim 44, wherein said compound is

